REMARKS

Entry of this amendment, and reconsideration and allowance of this application, as amended, is respectfully requested.

This amendment is in response to the Final Office Action dated June 20, 2003.

By the present amendment, claims 3-5, directed to a non-elected invention, are cancelled as required in paragraph two of the Office Action. Also by the present amendment, dependent claims 10 and 11 have been amended to clarify the antecedent basis in these claims since, upon a review of the language therein, it was noted that some question might arise concerning antecedent basis. Specifically, in claim 10, the term "the plural commands" had previously been used. Similarly, in claim 11, the term "the command" had been used. Regarding this, in the parent claim 1, there is actually no specific antecedent basis for "plural commands." Instead, claim 1 defines "first commands" and "second commands." Therefore, claim 10 has been amended to clarify that "the first commands are commands for accessing to the normal area" and "the second commands are commands for accessing to the protected area." Claim 11 is correspondingly been amended to define that "the command" is actually "the second command" for accessing the protected area.

Entry of this amendment is requested, notwithstanding the finality of the Office Action. With regard to this, it is noted that this amendment is solely for purposes of clarifying the language defining the invention concerning the first and second commands. Since the first and second commands have previously been defined in the claims, entry and consideration of this amendment should not involve any further searching or substantial consideration on the part of the Examiner since this

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amendment is directed to issues already raised, rather than new issues. Also, if this application proceeds to appeal, it is respectfully submitted that this amendment will simplify the issues for appeal by removing a possible question as to the meaning of the term "the plural commands" in claim 10. Therefore, entry of this amendment in accordance with the provisions of 37 CFR § 1.116 is respectfully requested.

Before proceeding to the merits of this case, reconsideration of all documents cited in the Information Disclosure Statement filed on May 3, 2001 is again respectfully requested. Regarding this, it is noted that the final rejection of June 20, 2003 did not address the request for reconsidering the May 3, 2003 IDS which was set forth in the Remarks on pages 5-7 of the November 25, 2002 Amendment. As noted in the Remarks of the November 25, 2002 Amendment, the requirements of 37 CFR § 1.98(a)(3) for a concise explanation relevance for all of the listed documents are, in fact, met by the English translation of the International Search Report which was provided with the IDS. Therefore, consideration and inclusion of a marked copy of the form PTO/1449 filed with the May 3, 2001 IDS is again respectfully requested for the reasons set forth in the Remarks of the November 25, 2002 Amendment. For the Examiner's convenience in this regard, a new copy of the PTO-1449 form and the International Search Report filed on May 3, 2001 is provided herewith.

Turning to the merits of the case, reconsideration and removal of the rejection of claims 1, 6 and 8-16 over the DeRoo and the rejection of claims 2-7 over the combination of DeRoo and Kilpatrick is respectfully requested for the reasons set forth below.

At the outset, as discussed in the Remarks of the last amendment filed on November 25, 2002, it is again respectfully submitted that, notwithstanding certain similarities between the present claims and the cited prior art, <u>neither DeRoo nor</u>

Kilpatrick teach or suggest the features set forth in the final paragraph of claim 1 of using first commands for reading, writing and erasing a first one of plural areas and second commands, different from the first commands, for reading writing and erasing a second one of the plural areas. Even more specifically, it is respectfully submitted that neither DeRoo nor Kilpatrick suggest providing specific first commands for accessing to a normal area and second commands for accessing to a protected area (where the first and second commands are different from one another), as defined, for example, in claim 10.

In order to appreciate the differences between the present claimed invention and the invention set forth in DeRoo, the following brief explanation of the present invention will be provided. Referring first to Fig. 3 (solely for purposes of example) of the present application, a construction of a memory in accordance with the present invention can be seen with the user data area 171 of the memory being divided into two specific user area designated as a "normal area" and "protected area." In conjunction with this, Fig. 5 of the present application shows the operation of the present invention using a "normal read command" in step S110 and a "protected area read command" in step S114. The use of these two different read commands is discussed, for example, beginning on the last line of page 17 of the specification. As set forth there:

> "A normal read command and a protected area read command will be described below with reference to Fig. 5. In step S110, the microprocessor 16 checks whether the command issued by the host computer 2 is a normal read command. If the command issued by the host computer 2 is a normal read command, the microprocessor 16 proceeds to step S111, whereas if the command issued by the host computer 2 is not a normal read command, the microprocessor 16 proceeds to step S114."

In other words, in the present invention, the microprocessor 16 is looking for two different types of read commands (i.e. a normal read command and a protected area read command) to determine which instruction flow to follow. A further description regarding the operation if a protected area read command is provided can be found on page 19, line 13 et seq.

Thus, the present invention defined by the claims under consideration is predicated on the fact that two different sets of commands, different from one another, are utilized in conjunction with two different areas of the memories. In other words, not only are the areas of the memory different, but the actual commands for reading, writing and erasing these areas are also different from one another.

Although the DeRoo patent may, upon initial inspection, appear to be similar to the present invention, a close examination of this document indicates that it fails to teach an arrangement such as defined in independent claim 1 and its dependent claims of an arrangement in which both the addresses for two different memory areas are different and the commands for reading, writing and erasing these two different areas is also different from one another.

More specifically, as noted in the Office Action, DeRoo discloses an EEPROM which corresponds to a non-volatile semiconductor memory as defined in the present claims. Also, a SCPI (System Control Processor Interface) is provided in DeRoo (as shown in Fig. 2) corresponding to the claimed part for connecting to a host computer. The system processor controller SCP 26 in Fig. 2 of DeRoo is also similar to a part for controlling a non-volatile memory as defined in the present claims. However, after this point, the similarity between DeRoo and the present claimed invention ends.

For example, as pointed out in the Office Action DeRoo teaches in column 10, line 46 through column 11, line 26 that the CPU can write into an input buffer 30 (see lower right side of Fig. 2) at addresses 60H or 64H. On the other hand, as also noted in the Office Action, column 25, lines 44-54 of DeRoo teach the addressing of a RAM 348 by the SCP 26 at addresses 8000H-FFFFH. Accordingly, DeRoo teaches that the addressing for the input buffer 30 is different from the addressing for the RAM 348. <u>However, there is nothing in this teaching of different addresses which would lead to using different write commands of the CPU into the input buffer 30 as opposed to the write commands of the CPU into the RAM 348</u>. The different addresses discussed by DeRoo are simply used to designate <u>places to write to data,</u> as opposed to the present claims <u>which define that the actual content of the processing</u> (that is reading, writing or erasing) in the different area <u>are different from one another</u>. To express this another way, the mere fact that different addresses are used in DeRoo does not lead to the conclusion that different commands are also used for these different addresses. Accordingly, reconsideration and removal of the rejection of claim 1 based on DeRoo is respectfully requested.

Reconsideration and allowance of the dependent claims 6 and 8-16 over DeRoo is also respectfully requested. These claims define further specific features of the present invention, including the fact that the first and second areas defined in claim 1 correspond to a normal area and a protected area, respectively. In particular, claim 10 has now clarified that:

> "The first commands are commands for accessing to the normal area, [and] the second commands are commands for accessing to the protected area."

It is respectfully submitted that there is <u>nothing in DeRoo which teaches or suggests any such first commands to access the normal area and different second commands</u>

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for accessing to the protected area. As noted above, DeRoo simply teaches using different addressing, but does not teach or suggest that the commands to these different areas themselves are actually different.

Returning to Fig. 5 and the discussion on page 18 and 19 of the present specification, for example, the significance of this difference between the present invention and DeRoo becomes apparent. As discussed above, in the present invention, actual "normal read commands" and "protected area read commands" are provided which can be recognized by the microprocessor 16 in determining how processing will proceed. It is urged that there is nothing in the DeRoo reference which provides any such teaching of different signals which can be recognized to direct further processing. Claims 6 and 9-16 clearly define detailed features for the use of these different commands in the operation of accessing and operating a normal area and a protected in a manner completely unsuggested by the DeRoo patent. Therefore, reconsideration and allowance of dependent claim 6 and 9-16 is also respectfully requested.

Reconsideration and allowance of dependent claims 2 and 7 over the combination of DeRoo and Kilpatrick is also respectfully requested. In the Office Action, it is recognized that "DeRoo fails to specifically teach dynamically changing the sizes of a first area and a second area." However, the Office Action goes on to note the arrangement of Kilpatrick in providing a programmable sized portion locked down and a programmable range portion where overwriting takes place. Therefore, the Office Action suggests the modification of DeRoo with Kilpatrick to arrive at the presently claimed invention.

Applicants respectfully submit that, in the first place, that there is no suggestion, other than Applicants own teaching, that would motivate one to make

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this combination proposed in the Office Action. <u>Indeed, it is respectfully submitted</u> <u>that this proposed modification goes directly against the specific teachings of DeRoo</u> <u>that, once set, the protected area size is not to be changed</u>. Regarding this, reference is made to the abstract of DeRoo which states:

> "Once configured to protect a <u>specific size</u> and location in the non-volatile memory, the invention prevents the write control signal to the memory to be asserted when the address of the data access requested by the CPU is in the protected area of the memory. <u>This has</u> <u>the effect of preventing modification of the protected area by a sector</u> <u>modification algorithm</u>."

Similar language can be found in column 3, line 34 et seq. of DeRoo. <u>As such, it is</u> <u>quite clear that DeRoo is directed to not permitting a change in the size of the</u> <u>protected area</u> once the size of the protected area has been set during manufacture. As such, this teaching is directly contrary to the feature of claim 2 and claim 7 of dynamically changing the size of the first and second areas on the basis of an instruction by the host computer. Accordingly, the proposed modification of DeRoo relying on the teachings of Kilpatrick would go directly against the specific teachings of DeRoo of not permitting modification of the size of the protected area once the manufacturing process has set this size.

Beyond this, as noted above, Kilpatrick also fails to provide any teaching for providing first commands for controlling the reading, writing and erasing of a first area which are different from second commands for reading, writing and erasing a second area. Therefore, Kilpatrick fails to make up for the shortcomings of the primary reference to DeRoo in this regard.

For the reasons set forth above, it is respectfully submitted that the presently pending claims clearly define over the cited prior art, and entry of this amendment and allowance of this application, as amended, is earnestly solicited. Alternatively,

entry of this amendment for purposes of placing the application in better form for appeal, as discussed above, is requested.

If the Examiner believes that there are any other points which may be clarified or otherwise disposed of either by telephone discussion or by personal interview, the Examiner is invited to contact Applicants' undersigned attorney at the number indicated below.

To the extent necessary, Applicants petition for an extension of time under 37 CFR 1.136. Please charge any shortage in fees due in connection with the filing of this paper, including extension of time fees, to the Deposit Account No. 01-2135 (Case No. 566.38877X00), and please credit any excess fees to such Deposit Account.

Respectfully submitted,

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APPENDIX